**Additional File 1. Sequences of oligos to generate single guide RNAs**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Target Gene** | **Target sequence a** | **PAM b** | **First oligo c** | **Second oligo d** |
| *prdm12b* | GCTGGGGGAACACCTGTTCG | AGG | TTAATACGACTCACTATAGG GCTGGGGGAACACCTGTTCG GTTTTAGAGCTAGAAATAGCAAG | AAAAAAGCACCGACTCGGTGCCACTTTTTCAAGTTGATAACGGACTAGCCTTATTTTAACTTGCTATTTCTAGCTCTAAAAC |
| *bhlhe22* | TTCACACACAAAGATCCGGT | CGG | TTAATACGACTCACTATAGG TTCACACACAAAGATCCGGT GTTTTAGAGCTAGAAATAGCAAG | AAAAAAGCACCGACTCGGTGCCACTTTTTCAAGTTGATAACGGACTAGCCTTATTTTAACTTGCTATTTCTAGCTCTAAAAC |
| *nkx6.1* | AGTGGAGGATGCTGGTCCAG | TGG | TTAATACGACTCACTATAG AGTGGAGGATGCTGGTCCAG GTTTTAGAGCTAGAAATAGCAAG | AAAAAAGCACCGACTCGGTGCCACTTTTTCAAGTTGATAACGGACTAGCCTTATTTTAACTTGCTATTTCTAGCTCTAAAAC |

a Genomic sequence targeted by the single guide RNA

b Protospacer adjacent motif (PAM) sequence in the genomic DNA recognized by Cas9

c Sequence of the first oligo used to assemble the guide template containing the T7 promoter sequence

d Sequence of the second oligo used to assemble the guide template containing the constant region